

CME Inspection: Sunoco Middle Creek Conveyance, Marcus Hook, Delaware County
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The Sunoco Middle Creek Conveyance is located at the Sunoco Marcus Hook Refinery in Marcus Hook, Pennsylvania. The refinery has been in operation since 1902. The conveyance is a 1.5-mile section of what was Middle Creek, and was used to transport process wastewater and stormwater runoff from several oil-water separators at the facility. Closure was achieved in 1995, with the final stabilization and capping of wastes in the channel. There are five wells for the Middle Creek Conveyance: MW-17, MW-28, MW-30, MW-40, and MW-86. MW-86 is the upgradient well. However, MW-86 seems to be more contaminated with respect to volatile organics, such as benzene, than the downgradient wells.

MSCs were exceeded for a number of compounds in the wells, including total dissolved solids, chemical oxygen demand, iron, chromium, sodium, chloride, manganese, lead, benzene, and bis(2-ethylhexyl)phthalate, though the latter also showed up in the field blank in a lesser concentration. The water from the wells was less turbid than previously, possibly due to purging the well with a bladder pump rather than a bailer. Neither Sunoco nor PADEP did analysis for dissolved metals. Consequently, there is no accurate assessment of what is going on with metals at this facility. There is a great deal of made land at this facility, the sediments of which could arguably be the primary source of metals in these analyses, despite the historical presence of lead and chromium in the refinery processes. Without a dissolved metals analysis, it is difficult to tell.

The number and spacing of wells at this facility seem to be inadequate, given the length of the Middle Creek Conveyance. The utility of MW-86 as an upgradient well seems questionable, as well, since it seems to be more impacted by the facility than the downgradient wells.